

Amendment dated October 8, 2010

Reply to Office Action of July 8, 2010

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1-2. (Cancelled).

3. (Currently amended) A method of increasing muscle function in a subject suffering from severe wasting, said method comprising administering to said subject a the GRF analog (hexenoyl trans-3)hGRF(1-44)NH₂ (SEQ ID NO: 7), wherein said subject has at least one of the following characteristics:

- (a) said subject has a body mass index less than or equal to 20;
- (b) said subject has a weight less than 90% of ideal body weight;
- (c) said subject is a male and said subject has a fat free mass index less than or equal to 16; or
- (d) said subject is a female and said subject has a fat free mass index less than or equal to 15.

of formula A:

X-GRF-Peptide—(A)

wherein;

the GRF peptide is a peptide of formula B;

A1-A2-Asp-Ala-Ile-Phe-Thr-A8-Ser-Tyr-Arg-Lys-A13-Leu-A15-Gln-Leu-A18-Ala-Arg-Lys-Leu-Leu-A24-A25-Ile-A27-A28-Arg-A30-R0 (B) (SEQ ID NO: 1)

wherein;

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_____ A1 is Tyr or His;

_____ A2 is Val or Ala;

_____ A8 is Asn or Ser;

_____ A13 is Val or Ile;

_____ A15 is Ala or Gly;

_____ A18 is Ser or Tyr;

_____ A24 is Gln or His;

_____ A25 is Asp or Glu;

_____ A27 is Met, Ile or Nle

_____ A28 is Ser or Asn;

_____ A30 is a bond or amino acid sequence of 1 up to 15 residues; and

R0 is NH₂ or NH-(CH₂)_n-CONH₂, with n=1 to 12; and

X is a hydrophobic tail anchored via an amide bond to the N terminus of the peptide and the hydrophobic tail defining a backbone of 5 to 7 atoms;

wherein the backbone can be substituted by C₁₋₆-alkyl, C₃₋₆-cycloalkyl, or C₆₋₁₂-aryl and the backbone comprises at least one rigidifying moiety connected to at least two atoms of the backbone;

said moiety selected from the group consisting of double bond, triple bond, saturated or unsaturated C₃₋₉ cycloalkyl, and C₆₋₁₂ aryl.

4-7. (Cancelled)

8. (Previously presented) The method of claim 3, wherein said muscle function is selected from the group consisting of:

- (a) muscle strength;
- (b) muscle endurance; and
- (c) both (a) and (b).

9. (Original) The method of claim 8, wherein said muscle function is muscle strength.

10. (Original) The method of claim 9, wherein said muscle strength is peripheral muscle strength.

11. (Original) The method of claim 8, wherein said muscle function is muscle endurance.

12. (Currently amended) The method of claim 3, wherein said administering increase results in a reduction of reduces a parameter selected from the group consisting of:

- (a) breathing discomfort;
- (b) leg discomfort; and
- (c) both (a) and (b).

13. (Currently amended) The method of claim 3, wherein said administering increase results in an increases in lean body mass in said subject.

14. (Currently amended) The method of claim 3, wherein said administering increase results in a decreases in fat mass in said subject.

15. (Cancelled)

16. (Currently amended) The method of claim 3 45, wherein said wasting is associated with a condition selected from the group consisting of chronic obstructive pulmonary disease, chronic renal failure, congestive heart failure, human immunodeficiency virus infection, acquired

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immunodeficiency syndrome, cancer, malnutrition, frailty, immobilization paraplegia and spinal disorder.

17-21. (Cancelled)

22. (Previously presented) The method of claim 3, wherein said GRF analog is administered through a route selected from the group consisting of intravenous, oral, transdermal, subcutaneous, mucosal, intramuscular, intranasal, intrapulmonary, parenteral, intrarectal and topical.

23. (Previously presented) The method of claim 3, wherein said GRF analog is administered in a dose from about 0.0001 mg to about 4 mg.

24. (Previously presented) The method of claim 23, wherein said GRF analog is administered in a dose selected from the group consisting of about 1 mg and about 2 mg.

25-80. (Cancelled)